

stratum of the scale is all a myth - the
seed lies loose, attached only by the base) within
the cell as in all other *Juniper* - but in the
male flower there is a marked difference
In the other sections there is always a single
male flower (apertory in *Opocedrus terminalis* in
Laburn) consisting of a single staminal column
but in *Juniper* there are several male
flowers (staminal columns) each subtended
by a distinct bract and collected at first into
a globular head but spreading when fully
out. Historically & botanically characterised this
as *Arceuthobium conopsea* Bartaloni refers
to them without reading them for he
merely says *amentis masculis globosis*. I
could quote many more instances of great
carelessness in Bartaloni's *Coniferarum* of the *Bradbury*
but this is enough to show that to trust go through
all the details for myself and should be very
glad to know of so careful an observer as
Engelmann has published anything by which
I might check my own observations.

Yours very truly,
George Engelmann

25, WILTON PLACE.
S.W.

London
June 15/79

My dear Gray

I have now taken to
Gymnosperma and write to know
whether Engelmann who I understand
has been studying *Coniferarum* has
published anything of importance about
them. I thought that after the labours
of A. C. Richard Endlicher Bartaloni
Humboldt and so many others that I
should have only the trouble of compiling
but the very first genera have given
me much more trouble for I find
nothing for granted and find Bartaloni's
work exceedingly careless - In *Juniper*
(which I have done) neither he nor

Tulane - nor apparently any one else
have taken any notice of Griffiths
paper in the Linnean Transactions
and he alone seems to have carefully
traced the development of the flowers
of *Gaetium* from the observation of
the living plants. Though Deccaris
observation are also useful, but in the
first genus of true Coniferae I take my
Juniperus *Spiraea* *Parlatore* full of
errors. Passing over the long exploded idea
that the staminal column of the male
flower is an anacanthum and the anther-
connectives bracts - he cannot have
traced the development of the galbules
(which we may retain that name for
the drobbles of the tribe of *Cupressaceae*)
when he speaks of a bony testa of the seed

when in studying Richard's *Coniferae*
on the fruits themselves he might have
seen that the true seed fruit very
of Richard is free within the bony
mucub of Richard but which we may
well call a pycnium formed from the
mucub of the ^{immature} scales of the galbules - it again in
the *J. drupaceus* Labill. which Endlicher
proposed as a section under the name of
Sagocedrus and I have lately as a
genus under the name of *Arceuthobium*
Parlatore reduces it to the section
Arceuthobium without paying the slightest
attention to its distinctive characters
In the galbules the difference ~~is~~ between
this and *Juniperus* consists chiefly
in the very thick woody lepton of the
pycni, closely combined into a shell
endocarp (treating the galbules as a drupe)
instead of being becoming separable pycni as in *Juniperus*
the consolidation of the testa with the inner